



Nursing Research

"Nurses are a vital part of any health care organization. The unique perspective they bring to research is valuable to the system as a whole and, particularly, to the patients."

John G. Demakis, MD

Director, Health Services Research and Development Service

What makes nursing research unique?

Nursing is the largest health care profession, and they are the single biggest operational cost in any health care system.¹ Their effect and contribution to the daily operation of any health care organization is thus of great importance. Nurses bring a special perspective to research because they have a unique relationship to patients, having more direct contact with patients than any other health care professionals. Nursing research, that is research conducted by nurse investigators, is aimed at high-priority health issues for veterans. The Nursing Research Initiative (NRI) was initiated by the Under Secretary for Health and was implemented by the Office of Research & Development, in collaboration with the Nursing Strategic Health Care Group. Managed by HSR&D, the NRI program encourages the development of nurse investigators to conduct independent research.

What kinds of issues are nurse investigators researching?

The NRI program invites study proposals from nurse investigators in health services, medical and rehabilitation research that address a wide range of issues pertaining to patient-centered care. Nursing research projects focus on a variety of health care issues, such as dementia, congestive heart failure, cancer pain management, spinal cord injury, and improving adherence to antiretroviral therapy in HIV-infected veterans. Twelve new NRI projects were funded in FY 2001, including studies on preventing home injury to veterans with Alzheimer's disease, care giving for stroke recovery patients after hospital discharge, and an intervention study for veterans with chronic pulmonary disease.

Below is a brief discussion of some of the exciting HSR&D nursing studies.

Nurses to take more active role in pain management for cancer patients

Pain is considered a fifth vital sign for VHA, which makes this study of particular importance. Estimates of pain in hospitalized patients with cancer are as high as 73 percent, yet research suggests that nurses may lack the knowledge to adequately manage pain and may harbor attitudes that interfere with successful pain management. An HSR&D study has educated 12 registered nurses in pain assessment and management. These specially trained Pain Resource Nurses have been working over the past year in VA facilities in Tampa and Bay Pines, Florida to provide pain management education and consultation to the staff nurses, so that they can decrease patient pain and increase functional status among hospitalized veterans with cancer. This study has demonstrated a significant improvement in attitude among participating nurses, and may provide an intervention to improve pain management for cancer patients and other veteran patients with painful diseases or conditions.

McMillan S, Hagan S, Tittle M, et al.. Knowledge and attitudes of nurses in veteran hospitals about pain management in patients with cancer. Oncology Nursing Forum; 27(9):1415-23, 2000.

McMillan S, Tittle M, Hagan S, Laughlin J. Management of pain and pain-related symptoms in hospitalized veterans with cancer. Cancer Nursing; 3(5):327-335, 2000.

HSR&D study NRI 95-042. Principal Investigator: Susan Hagan, MSN.

Nurse counseling increases physical activity in elderly patients

Many elderly patients are at high risk for health complications and functional impairment due to low levels of physical activity. This study sought to determine if nurse telephone counseling could assist elderly patients in establishing and maintaining a regular walking program. In this randomized clinical trial, sixty to eighty year-old patients were referred to a walking program by their primary care providers. Over one year, all participants received one of the following interventions: 20 calls initiated by a nurse, 10 calls initiated by a nurse and 10 by an automated telephone message delivery system, or no follow-up calls. Results of the study showed that more than half of the study participants began a walking program, and that during the maintenance phase (7 to 10 months), both phone contact groups walked more than controls with no phone contacts. Findings also suggest that nurse counseling not only increases walking, it also produces significant improvements in measures associated with disease/disability risk.

Dubbert PM, Meydrech EF, Kirchner KA, Cooper KM, Bilbrew DE. Exercise counseling and walking for exercise among elderly VA primary care patients. Federal Practitioner. In press for July 2001 issue.

HSR&D study NRM 95-022. Principal Investigator: Patricia Dubbert, PhD.

Redesigning patient handling to reduce nursing injuries

Nurses are an invaluable asset to a health care organization and are becoming increasingly difficult to acquire and retain. One reason for nursing shortages may be that they have one of the highest incidences of work-related back injuries of any profession. Over the past 20 years, efforts to reduce these types of injuries have been largely unsuccessful. The goal of this HSR&D study is to reduce the incidence and severity of nursing back injuries through the redesign of stressful patient handling tasks. These tasks were evaluated on many levels, including biomechanical, ergonomic, and quantitative. Techniques used to perform tasks were then redesigned to reduce the risk of musculoskeletal injury, and laboratory-based assessments were conducted to assess the benefit of the proposed intervention strategies. Back injury for those nurses performing the redesigned tasks were then compared to those who performed tasks using traditional techniques. This evaluation showed that nurses who used the redesigned techniques had significant improvement in several areas. Study recommendations include the use of friction reducing devices for

lateral transfers, ceiling mounted patient lifts, and bed adjustments for height. Building on this project, a new program initiative – “VISN-Wide Deployment of a Back Injury Prevention Program for Nurses: Safe Patient Handling and Movement” – was funded for \$2.2 million.

Nelson A, Tiesman H, Lloyd J. Safe patient transfer and activity. Nursing Management; 31(12):47, 2000.

HSR&D study NRI 95-150. Principal Investigator: Audrey Nelson, RN, PhD.

References:

1. Kizer, K. Promoting innovative nursing practice during radical health system change. *Nursing Clinics of North America*; 35(2):429-440, June, 2000.

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Geraldine McGlynn, M.Ed., Manager, Information Dissemination Program, MDRC (152-M), VA Boston Healthcare System, 150 S. Huntington Avenue, Boston, MA 02130. Phone: 617-278-4433. Fax: 617-278-4438.

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